# Camp Edwards Small Arms Range Working Group
# Range Inspection Form
# J RANGE

Date of Inspection: _____06-14-11_____

Name of Inspector: _____Jane Dolan_____

Organization: _____U.S. EPA_____ _____

Signature of Inspector: _____

| | | |
|---|---|---|
| Unit Utilizing Range: N/A | Component: | Wind Direction: |
| Number of Personnel Utilizing Range: | | Weather: misty |
| Range Hot Time: | Range Cold Time: | Air Temperature: |
| Unit POC Name/Rank: | Range Control POC Name/Rank: | |
| Inspector time arrived on range: 1100 | Inspector time departed range: 1230 | |
| FIRING LANES USED DURING TRAINING<br>(circle the lanes used TANGO Range: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 | | |

| WEAPONS SYSTEMS: | TYPE OF AMMUNITION: | NUMBER EXPENDED: |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

## A. General Condition of Facility: **Check one for each**

| | good | Fair | poor | comments |
|---|---|---|---|---|
| Entrance | X | | | |
| Tower | X | | | |
| Bleachers | X | | | |
| Target frames | X | | | |
| Firing line | X | | | |
| Pavilion | X | | | |
| Shed | X | | | |
| Parking areas | X | | | |

Circle one answer per question and describe observations as necessary

1. a) Are there any oil or fuel leak stains in the parking areas? X NO YES

*If yes, describe extent and location:*

b) Are all containers of oil, fuel, lubricants, or liquid cleaners properly secured to prevent spillage?

N/A NO YES

*If no, describe location and material:*

c) Were waste materials properly disposed or transported to the Range Control waste storage area for temporary storage?

N/A NO YES

d) Any signs of stressed vegetation?

X NO YES

2. Do the sand boxes and sand bags in front of target frame fully cover / protect the base of the bullet trap system?

X NO YES

There are significant holes in the top of the sand box in lanes 3 and 5. It is recommended that these holes be repaired, and the top of the sand boxes weatherized to deflect water. Sand appears to be leaking from the bottom of the sand boxes in lanes 1, 5 and 8.

*(Look for skewed boxes or gaps between the boxes not addressed by sand bags which may allow bullets to damage the bottom frame of STAPP.)*

*If no, please describe:*

3. Does the density of bullets in the face of the sand boxes pose a ricochet hazard?
X NO YES

*(Check if present condition of sand boxes would cause ricochet of fired bullets.)*
*If yes, please describe condition and location of sand box*:

The density of bullets in the face of the sand boxes cannot be determined; however, there do not appear to be many impact holes. It is recommended that the sand within the sand boxes be screened for projectiles – either upon rehabilitation of the sand boxes or upon reaching 500,000 rounds fired to gage the number of and condition of the projectiles.

4. Any tears or holes in the surface of sand box tarps? NO YES

*N/A*

*Inspect the tarps covering each sand box.*
*Look for holes or tears in the covering that would allow rain to wet the sand within the frame.*
*If yes, please describe condition and location of sand box:*
There are significant tears and holes in the sand box tarps. It is recommended that the tarps be replaced.

5. Any signs of non-compliance with EPS? NO YES

*If yes, describe possible issues:*

**See comments above**

6. Any signs of non-compliance with either EPA or EMC plan approval conditions?
NO YES

*If yes, describe possible issues:*

*See comments abo e*

**B. Erosion: Circle one and indicate on the range sketch below**

1. Firing Positions: X NONE MODERATE SEVERE

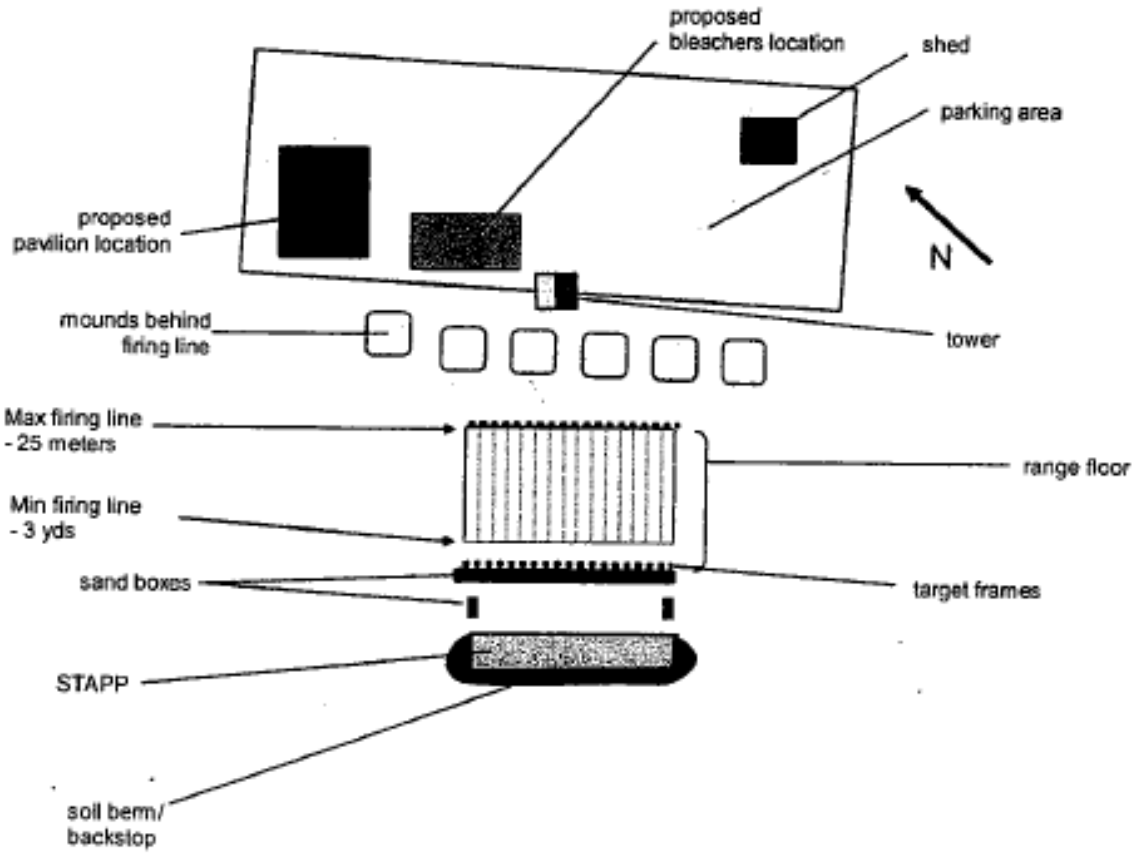
*If moderate or severe, please describe:*

2. Berm/Backstop: X NONE MODERATE SEVERE

*If moderate or severe, please describe:*

3. Range Floor: X NONE MODERATE SEVERE

*If moderate or severe, please describe:*



## C. Vegetation: circle one

| | Percent Vegetative Coverage | | |
|---|---|---|---|
| Mounds behind firing line | 0-25% | 26-50% | X 51-100% |
| Soil berm/backstop | 0-25% | 26-50% | X 51-100% |
| Range floor | 0-25% | 26-50% | X 51-100% |

1. Please note any need for revegetation:

There is sparse vegetation.

## D. Range visual inspection:

1. Is the cover in need of repair? NO X YES

*Look for any portion of the cover where the black rubber granular material is visible. Black rubber granular material is not visible. However, due to the accumulation rate of water in the STAPP reservoir replacement of the membrane should be considered.*
*If yes, is the hole, rip or tear in the bottom one foot of STAPP?* NO YES

**GOOD condition:**
Some dimpling of surface, but no black rubber granular material is visible

**POOR condition:**
Any holes in the surface where the black rubber granular material is visible

2. Is there any separation of the cover seams greater than 1 inch in length?
NO YES

*If yes, is the location in the bottom one foot of STAPP™?* NO YES

Detailed inspection not conducted.

3. Is there any separation of the cover seams greater than 6 inches in length?
NO YES

*If yes, please describe location:*

Detailed inspection not conducted.

4. Any significant irregular settling or bulging of granular rubber material? X NO YES

*If yes, please describe:*

5. Is the synthetic lumber framing in good condition? NO X YES

*If no, please describe:*

6. Any signs of over/undershot or shots off to the side of STAPP? NO X YES

*If yes, please describe:*

There are both signs of over and undershot. It is recommended that the amount of over and undershot be recorded at some frequency. BMPs may need to be modified depending on the results of over and undershot monitoring.

7. Any ponding of water on top of the cover? X NO YES

*If yes, please describe extent and location:*

8. Is there indications of more than 2 inches of water in the reservoir?
NO X YES

Five inches measured.

9. Was any smoke released from the STAPP™ during firing? NO YES

*If yes, please describe:*

N/A

10. Any liquid seeping from the STAPP™ system? X NO YES

*If yes, please describe:*

11. Are the wooden barriers above the STAPP™ system, on the berm, in place for the length of STAPP and at least 36 inches in height? NO X YES

*If no, please describe:*

12. Are the covers of the monitoring wells and lysimeters secure? NO X YES

*If no, please describe:*

13. Has all ammunition or expended brass been policed and removed? NOX YES

## Bullet trap detailed inspection when cover is removed Not conducted

This is the inspection is to be completed by Camp Edwards personnel 3 times per training year: in the fourth week of March before training begins, in the fourth week of July during training season, and in the fourth week of October once peak training period is completed.

1. What is the depth of water in the reservoir? Less than 2 inches Greater than 2 inches

*If more than 2 inches deep, how deep is it?:*

2. Is the system to monitor the water level working properly? NO YES

*If no, please describe:*

3. Any significant irregular settling or bulging of granular rubber material? NO YES

*This may be indicative of a problem with the liner. The material must be at an even level across the STAPP to stop bullets effectively. If yes, please describe:*

4. Complete the photo log at the end of this form, documenting site features listed in log. Photos should be taken of the firing line, the soil berm, bullet containment system, and range floor. Note any field observations on the log.

5. Notes regarding need for repair and maintenance:

**STAPP™ internal inspection** **Not conducted**

Conducted after 500,000 rounds have been fired on T Range or every 3 years, whichever occurs first. At that time, all of the granular rubber material is removed.

1. Is the water collection unit in good condition? NO YES

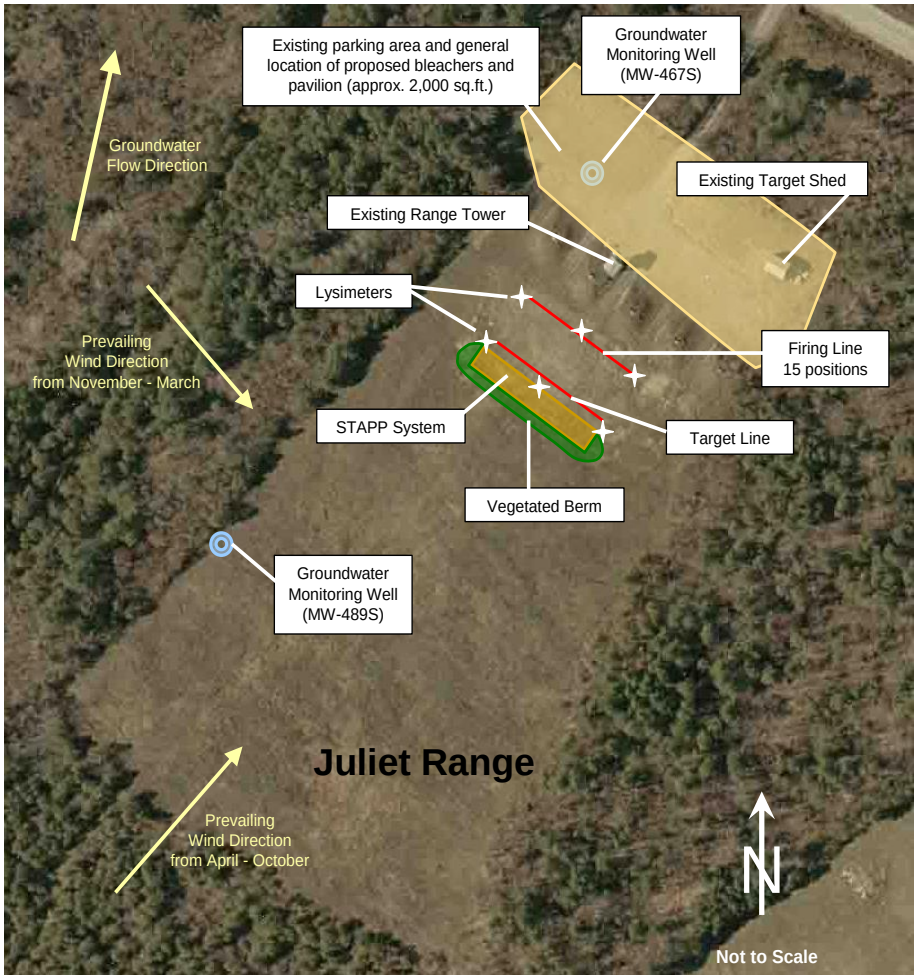
*Look for any holes, punctures, or leaks in the piping which would allow water to be released to ground surface. If no, please describe:*

2. Any perforations of the impermeable liner? NO YES

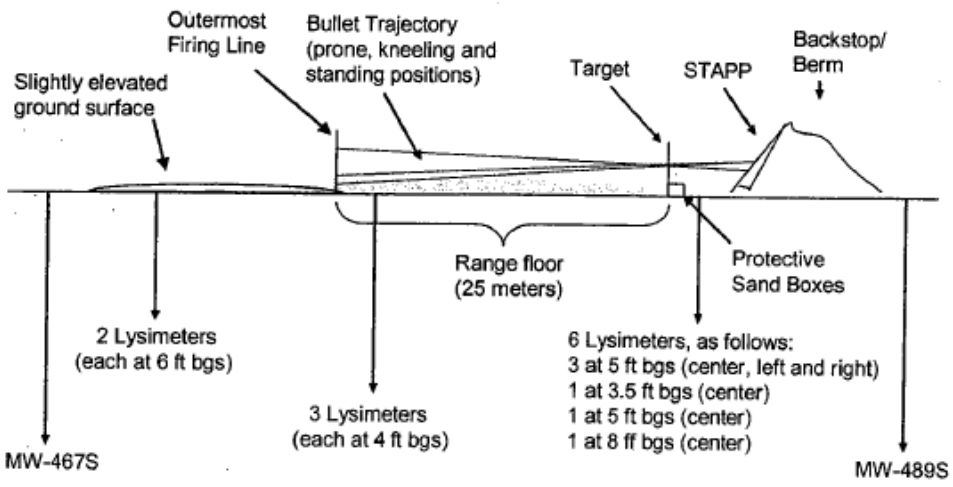
*Inspect the liner for any holes, rips, punctures, or seam failures.*

*If yes, please describe:*

Notes regarding need for repair, maintenance and/or design or operational changes:




**Lateral View of Tango Range**




Key:

*Multiple firing distances in range floor*
*maximum distance is 25 meters from target (Outermost firing line)*
*minimum distance is 3 yards from target*

## Photo Log:

| | | |
|---|---|---|
| Photo no: | Date: | Place photo here |
| Location:<br>Firing line | | |
| Range: | | |
| Description: | | |

| Photo no: | Date: | Place photo here |
|---|---|---|
| Location:<br>Soil Berm | | |
| Range: | | |
| Description: | | |

| Photo no: | Date: | Place photo here |
|---|---|---|
| Location:<br>Bullet Containment System | | |
| Range: | | |
| Description: | | |

| Photo no: | Date: | Place photo here |
|---|---|---|
| Location:<br>Range Floor | | |
| Range: | | |
| Description: | | |